

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Frank Cire on 7/1/05.

Amend the following Claims:

1. (Currently amended) A server apparatus adapted to communicate with at least one client, each client including an image storage unit having a spool function, the image storage unit for storing print data of a print job, and a printer via a network, comprising:

image storage means for storing the print data of the print job to be executed according to a print request from a client;

order management means for managing a print order of the print job to be executed according to the print request from the client;

transmission means for transmitting transmission permission information to the client based on the print order managed by said order management means, the transmission permission information indicating that the print data may be transmitted to said printer, such that the client directly transmits the print data to the printer without intervention of the server apparatus if the spool function of the image storage unit of said client is selected by a user;

determination means for determining whether a message, which indicates that the printing process of the print data has finished is received from the client within a predetermined time in response to the transmission permission information; and

control means for transmitting the print data of the print job of the print order from said image storage means instead of the client to the printer when said determination means determines that the message is not received.

4. (Currently amended) A print managing method for a server apparatus adapted to communicate with at least one client, each client including an image storage unit having a spool function, the image storage unit for storing print data of a print job, and a printer via a network, comprising:

an image storage step of storing print data of a print job, to be executed according

to a print request from a client, in image storage means;

an order management step of managing a print order of the print job to be executed according to the print request from the client;

a transmission step of transmitting transmission permission information to the client based on the print order managed at said order management step, the transmission permission information indicating that the print data may be transmitted to the printer, such that the client directly transmits the print data to the printer without intervention of the server apparatus if the spool function of the image storage unit of said client is selected by a user;

a determination step of determining whether a message, which indicates that the printing process of the print data has finished is received from the client within a predetermined time in response to the transmission permission information; and

a control step of transmitting the print data of the print job of the print order from the image storage means instead of the client to the printer when it is determined in said determination step that the message is not received.

7. (Currently amended) A computer readable storage medium storing a program for implementing a print managing method for a server apparatus adapted to communicate with at least one client, each client including an image storage unit having a spool function, the image storage unit for storing print data of a print job, and a printer via a network, wherein the method comprises:

an image storage step of storing print data of a print job, to be executed according to a print request from the client, in image storage means;

an order management step of managing a print order of the print job to be executed according to the print request from the client;

a transmission step of transmitting transmission permission information to the client based on the print order managed at said order management step, the transmission permission information indicating that the print data may be transmitted to the printer, such that the client directly transmits the print data to the printer without intervention of the server apparatus if the spool function of the image storage unit of said client is selected by a user;

a determination step of determining whether a message which indicates that the printing process of the print data stored in the image storage unit has finished is received from the client within a predetermined time in response to the transmission permission information; and

a control step of transmitting the print data of the print job of the print order from the image storage means instead of the client to the printer when it is determined in said determination step that the message is not received.

8. (Currently amended) An information processing apparatus as a client, including a storage unit having a spool function, that communicates with a server apparatus, which manages a print order and has a spool unit for storing print data, and a printer via a network, comprising:

sending means for sending job information, which does not include print data, to the server apparatus so that the server apparatus manages a print order according to the job information;

image storage means for storing print data of a print job corresponding to the job information so that the information processing apparatus may directly transmit the print data to the printer without intervention of the server apparatus if the spool function of the image storage unit of said client is selected by a user;

selection means for causing a user to select one of a spool function of said image storage means and a spool function of the server apparatus via a user interface, which is adapted to store the print data of the print job to be executed according to the print request to the server apparatus;

determination means for determining whether the spool function of said image storage means is selected or the spool function of the server apparatus is selected by said selection means;

control means for, if it is determined by said determination means to use the spool function of the server apparatus, transmitting the print data to the server apparatus, whereas, if it is determined by said determination means to use the spool function of said image storage means, controlling said image storage means to store the print data and controlling said sending means to send the job information;

receiving means for receiving transmission permission information from the server apparatus indicating that the print data may be transmitted to the printer when the print data is stored in said image storage means; and

transmission means for transmitting the print data to the printer when said receiving means receives the transmission permission information from the server apparatus.

11. (Currently amended) A print managing method for an information processing apparatus as a client, including a storage unit having a spool function, that communicates with a server apparatus, which manages a print order and has a spool unit for storing print data, and a printer via a network, comprising:

a sending step of sending job information, which does not include print data, to the server apparatus so that the server apparatus manages a print order according to the job information;

an image step of storing print data of a print job corresponding to the job information so that the information processing apparatus may directly transmit the print data to the printer without intervention of the server apparatus if the spool function of the image storage unit of said client is selected by a user;

a selection step of causing a user to select one of a spool function of said image storage means and a spool function of the server apparatus via a user interface, which is adapted to store the print data of the print job to be executed according to the print request to the server apparatus;

a determination step of determining whether the spool function of said image storage means is selected or the spool function of the server apparatus is selected by said selection means;

a control step of, if it is determined by said determination means to use the spool function of the server apparatus, transmitting the print data to the server apparatus, whereas, if it is determined by said determination means to use the spool function of said image storage

means, controlling said image storage means to store the print data and controlling said sending means to send the job information;

a receiving step of for receiving transmission permission information from the server apparatus indicating that the print data may be transmitted to the printer when the print data is stored in said image storage means; and

a transmission step of for transmitting the print data to the printer when said receiving means receives the transmission permission information from the server apparatus.

14. (Currently amended) A computer readable medium storing a program for implementing a print managing method for an information processing apparatus as a client, including a storage unit having a spool function, that communicates with a server apparatus, which manages a print order and has a spool unit for storing print data, and a printer via a network, comprising:

a sending step of sending job information, which does not include print data, to the server apparatus so that the server apparatus manages a print order according to the job information;

an image step of storing print data of a print job corresponding to the job information so that the information processing apparatus may directly transmit the print data to the printer without intervention of the server apparatus if the spool function of the image storage unit of said client is selected by a user;

a selection step of causing a user to select one of a spool function of said image storage means and a spool function of the server apparatus via a user interface, which is adapted to store the print data of the print job to be executed according to the print request to the server apparatus;

a determination step of determining whether the spool function of said image storage means is selected or the spool function of the server apparatus is selected by said selection means;

a control step of, if it is determined by said determination means to use the spool function of the server apparatus, transmitting the print data to the server apparatus, whereas, if it is determined by said determination means to use the spool function of said image storage means, controlling said image storage means to store the print data and controlling said sending means to send the job information;

a receiving step of for receiving transmission permission information from the server apparatus indicating that the print data may be transmitted to the printer when the print data is stored in said image storage means; and

a transmission step of for transmitting the print data to the printer when said receiving means receives the transmission permission information from the server apparatus.

15. (Currently Amended) An information processing apparatus as a client including an image storage unit having a spool function, that communicates with a server apparatus, which manages a print order and has a spool unit for storing print data, and a printer via a network, comprising:

image storage means for storing print data of a print job to be executed according

Art Unit: 2624

to a print request so that the information processing apparatus directly transmits the print data to the printer without intervention of the server apparatus if the spool function of the of said client is selected by a user;

determination means for determining to use one of a spool function of said image storage means and a spool function of the server apparatus based on a condition of said image storage means, the spool function being adapted to store the print data of the print job to be executed according to the print request to the server apparatus;

control means for, if said determination means determines to use the spool function of the server apparatus, transmitting the print data to the server apparatus, such that the server apparatus directly transmits the print data to the printer, whereas, if said determination means determines to use the spool function of said image storage means, controlling said image storage means to store the print data;

receiving means for receiving transmission permission information from the server apparatus indicating the print data may be transmitted to the printer when the print data is stored in said image storage means; and

transmission means for transmitting the print data to the printer when said receiving means receives the transmission permission information from the server apparatus.

18. (Currently Amended) A print managing method for an information processing apparatus as a client including an image storage unit having a spool function, that communicates with a server apparatus, which manages a print order and has a spool unit for storing print data, and a printer via a network, comprising:

an image storage step of storing print data of a print job to be executed according to a print request so that the information processing apparatus directly transmits the print data to the printer without intervention of the server apparatus, in image storage step, if the spool function of the of said client is selected by a user;

a determination step of determining to use one of a spool function of said image storage step and a spool function of the server apparatus based on a condition of said image storage step, the spool function being adapted to store the print data of the print job to be executed according to the print request to the server apparatus;

a control step of, if said determination step determines to use the spool function of the server apparatus, transmitting the print data to the server apparatus, such that the server apparatus directly transmits the print data to the printer, whereas, if said determination step determines to use the spool function of said image storage means, controlling said image storage step to store the print data;

a receiving step of receiving transmission permission information from the server apparatus indicating the print data may be transmitted to the printer when the print data is stored in said image storage step; and

a transmission step of for transmitting the print data to the printer when said receiving step receives the transmission permission information from the server apparatus.

21. (Currently Amended) A computer readable medium storing a program for implementing a print method for an information processing apparatus as a client including an image storage unit

having a spool function, that communicates with a server apparatus, which manages a print order and has a spool unit for storing print data, and a printer via a network, comprising:

an image storage step of storing print data of a print job to be executed according to a print request so that the information processing apparatus directly transmits the print data to the printer without intervention of the server apparatus, in image storage means, if the spool function of the of said client is selected by a user;

a determination step of determining to use one of a spool function of said image storage step and a spool function of the server apparatus based on a condition of said image storage step, the spool function being adapted to store the print data of the print job to be executed according to the print request to the server apparatus;

a control step of, if said determination step determines to use the spool function of the server apparatus, transmitting the print data to the server apparatus, such that the server apparatus directly transmits the print data to the printer, whereas, if said determination step determines to use the spool function of said image storage step, controlling said image storage step to store the print data;

a receiving step of receiving transmission permission information from the server apparatus indicating the print data may be transmitted to the printer when the print data is stored in said image storage step; and

transmission means for transmitting the print data to the printer when said receiving means receives the transmission permission information from the server apparatus.

22. (Currently Amended) An information processing apparatus as a client including an image storage unit having a spool function, that communicates with a server apparatus, which manages a print order and has a spool unit for storing a print job and intermediate data of the print job, and a printer via a network, comprising:

image storage means for storing the print job and the intermediate data of the print job to be executed according to a print request such that the information processing apparatus directly transmits the print job to the printer without intervention of the server apparatus if the spool function of the of said client is selected by a user;

list acquisition means for acquiring a list of print jobs managed by the server apparatus;

job designation means for designating a print job to be previewed based on the list of print jobs acquired by said list acquisition means;

determination means for determining whether the intermediate data of the print job designated by said job designation means is stored in said image storage means or in the spool unit of the server apparatus;

intermediate data acquisition means for, if it is determined by said determination means that the intermediate data of the print job designated by said job designation means is stored in said image storage means, reading the intermediate data from said image storage means, whereas, if it is determined by said determination means that the intermediate data is stored in the server apparatus, downloading the intermediate data from the server apparatus; and

control means for displaying a preview image based on the intermediate data acquired by said intermediate data acquisition means.

Art Unit: 2624

26. (Currently Amended) A print managing method for an information processing apparatus as a client including an image storage unit having a spool function, that communicates with a server apparatus, which manages a print order and has a spool unit for storing a print job and intermediate data of the print job, and a printer via a network, comprising:

an image storage step of storing the print job and the intermediate data of the print job to be executed according to a print request such that the information processing apparatus directly transmits the print job to the printer without intervention of the server apparatus if the spool function of the of said client is selected by a user;

a list acquisition step of acquiring a list of print jobs managed by the server apparatus;

a job designation step of for designating a print job to be previewed based on the list of print jobs acquired by said list acquisition means;

a determination step of for determining whether the intermediate data of the print job designated by said job designation step is stored in said image storage step or in the spool unit of the server apparatus;

an intermediate data acquisition step of, if it is determined by said determination step that the intermediate data of the print job designated by said job designation step is stored in said image storage step, reading the intermediate data from said image storage step, whereas, if it is determined by said determination step that the intermediate data is stored in the server apparatus, downloading the intermediate data from the server apparatus; and

a control step of displaying a preview image based on the intermediate data acquired by said intermediate data acquisition step.

30. (Currently Amended) A computer readable storage medium storing a program for implementing a print managing method for an information processing apparatus as a client including an image storage unit having a spool function, that communicates with a server apparatus, which manages a print order and has a spool unit for storing a print job and intermediate data of the print job, and a printer via a network, comprising:

an image storage step of storing the print job and the intermediate data of the print job to be executed according to a print request such that the information processing apparatus directly transmits the print job to the printer without intervention of the server apparatus if the spool function of the of said client is selected by a user;

a list acquisition step of acquiring a list of print jobs managed by the server apparatus;

a job designation step of for designating a print job to be previewed based on the list of print jobs acquired by said list acquisition step;

a determination step of for determining whether the intermediate data of the print job designated by said job designation step is stored in said image storage step or in the spool unit of the server apparatus;

an intermediate data acquisition step of, if it is determined by said determination step that the intermediate data of the print job designated by said job designation step is stored in said image storage step, reading the intermediate data from said image storage step, whereas, if it

Art Unit: 2624

is determined by said determination step that the intermediate data is stored in the server apparatus, downloading the intermediate data from the server apparatus; and

a control step of displaying a preview image based on the intermediate data acquired by said intermediate data acquisition step.



GABRIEL GARCIA
PRIMARY EXAMINER